

IBM Sacramento Trading Area Market Analysis

August 19, 1991

Prepared by

INPUT

Mountain View, California

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OVERVIEW

- Introduction & Methodology
- Area Demographics
- Quantitative Analysis
 - Market Definitions - Sacramento Area
 - Market Sizes - State, Region, IBM
 - Market Sizes by Industry/Segment
 - IBM Market for Core Region
 - Targets Industry Sectors - Core Area
 - Professional Services - 1990
 - Professional Services - 1995
 - Distribution of State IS Expenditures
 - User Expenditures in Education
- Observations
- High Potential Offerings - INPUT's View
- Conclusions/Recommendations



INTRODUCTION/METHODOLOGY

STUDY OBJECTIVES:

- Size product/service markets - Core Area
- Identify large/high-growth industry sectors
- Analyze State Government and Education on a state-wide basis

SCOPE:

- Include all market segments except
 - Transaction Processing Services
 - Electronic Information Delivery
- Exclude Federal Information Services markets
- For counties described on following slide



METHODOLOGY

MARKET SIZING:

- Based on 1990 - 1995 INPUT market forecast
- Factored by county-level industry demographics
- Adjusted for local industry compute intensity

MARKET FORECASTS:

- Utilize INPUT 1990 - 1995 national growth rates
- Factored for local compute intensity by industry
- Include cross-industry as well as industry-specific product/service opportunities



GEOGRAPHIC COVERAGE FOR MARKET SIZING

AREA	COUNTIES			MARKETS
Core Service Area	Sacramento Placer Stanislaus Tulare	Kern Merced San Joaquin Yolo	Shasta Sutter Fresno El Dorado	All Vertical Markets
Greater S. California	Orange Santa Barbara San Luis Obispo	Los Angeles San Diego Ventura	Riverside San Bernardino	Education State Government
Greater North Bay	San Francisco Solano Napa	Alameda San Mateo Sonoma	Marin Contra Costa	Education State Government
Greater South Bay	Santa Clara	Santa Cruz San Benito	Monterey	Education State Government

GROUND RULES

- All market sizes should be considered plus or minus 15%.
- Percentage ranges for forecasts should be considered within (+/-) 2 - 4%.
- Recommendations are based on this analysis of market sizes coupled with other research not conducted as part of this study.



DEMOGRAPHICS

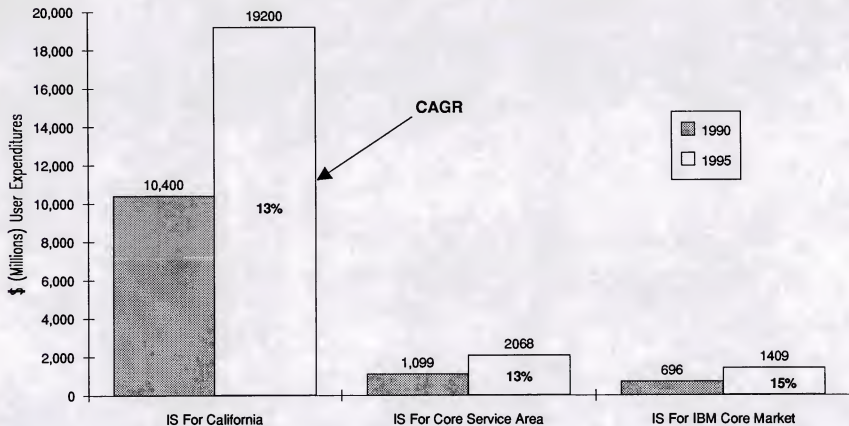
- Approximately 1750 establishments with computer installations exist in the Core Area
- Representing firms employing approximately one-half million
- Establishments (*excluding State Government*) typically smaller in employees and revenue than California and national averages
- Specific industries vary from national averages as well:
 - Discrete/Process Manufacturing lower in compute intensity due to agricultural influence
 - State government approximately 1.7 times as compute intensive as national averages
 - Local government more than twice as intense in compute intensity than national averages

MARKET SIZES/FORECASTS

- User expenditures/growth
 - Total California market
 - Core Area
 - Core area less software products
- Core Area market (1990 - 1995)
- Key industry sectors (1990 - 1995)
- Professional Services (1990 - 1995)
- Distribution of State Government Expenditures
- User Expenditures in Education



COMPARISON OF MARKET SIZES





IBM MARKET FOR CORE REGION (ADJ) - 1990

	Proc. (1) Services	Turnkey Systems	Apps. S/W Prod.	Systems Ops.	Systems Int.	Prof. Services	Network Svc. (2)	Sys. S/W Products	TOTAL
Discrete Manufacturing	1	10	12	2	3	14	0	9	51
Process Manufacturing	1	5	8	4	1	16	1	11	47
Transportation	0	1	2	0	1	1	0	2	7
Utilities	0	1	2	0	3	1	0	2	9
Telecommunications	2	5	6	1	2	9	0	7	32
Retail Distribution	0	5	3	1	2	1	0	3	15
Wholesale Distribution	1	5	8	1	1	3	2	5	26
Banking and Finance	3	3	12	6	1	6	0	9	40
Insurance	0	2	9	5	1	9	0	6	32
Medical	1	12	19	10	3	3	2	12	62
Education	0	4	16	1	1	1	1	5	29
Business Services	1	3	5	0	0	1	0	3	13
Consumer Services	1	1	2	0	0	0	0	2	6
State Government	3	6	9	34	21	85	1	41	200
Local Government	1	2	3	11	7	27	0	13	64
Misc. Industries	2	25	19	0	0	5	0	12	63
TOTAL	17	90	135	76	47	182	7	142	696

(1) - Excludes Transaction Processing Services

(2) - Excludes Electronic Information Services



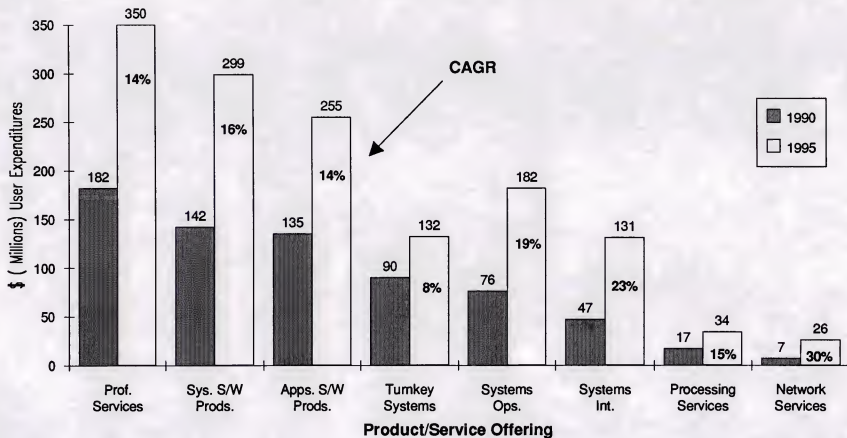
IBM MARKET FOR CORE REGION (ADJ) - 1995

	Proc. (1) Services	Turnkey Systems	Apps. S/W Prod.	Systems Ops.	Systems Int.	Prof. Services	Network Svc. (2)	Sys. S/W Products	TOTAL
Discrete Manufacturing	1	16	22	5	10	26	0	20	100
Process Manufacturing	3	8	16	9	3	31	3	22	95
Transportation	1	2	4	0	1	1	0	3	12
Utilities	1	1	4	1	6	3	0	4	20
Telecommunications	5	9	14	1	5	19	0	16	69
Retail Distribution	0	7	6	2	6	2	1	6	30
Wholesale Distribution	1	7	15	2	3	5	5	9	47
Banking and Finance	5	5	22	12	4	10	1	18	77
Insurance	1	3	17	8	4	17	0	13	63
Medical	3	16	40	21	5	5	6	24	120
Education	1	5	28	2	3	1	2	10	52
Business Services	1	5	11	0	1	1	0	6	25
Consumer Services	3	1	3	0	1	0	0	4	12
State Government	5	10	18	90	59	167	5	94	448
Local Government	1	3	6	29	19	53	2	30	143
Misc. Industries	2	34	29	0	1	9	1	20	96
TOTAL	34	132	255	182	131	350	26	299	1409

(1) - Excludes Transaction Processing Services

(2) - Excludes Electronic Information Services

IBM MARKET FOR CORE REGION (ADJ)



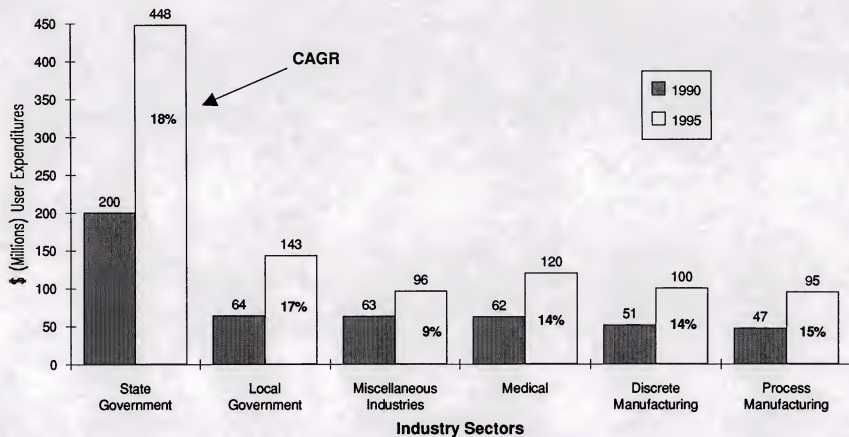
OBSERVATIONS PRODUCT/SERVICE OFFERINGS

- Key markets (*excluding software*) are value-added professional services, SI, SO, and related products
- Packaging software products into professional services based offerings offers potential for significant revenue drag
- Fastest growing segments are those that sell "total solutions"
- Network Services has highest growth rate, but is leveraging off the smallest base
- Turnkey systems represents a proportionately larger market in Core Area than in the state as a whole

(Reflects solution buying and smaller average firm size)



LARGEST INDUSTRY SECTORS - CORE AREA (ADJ)

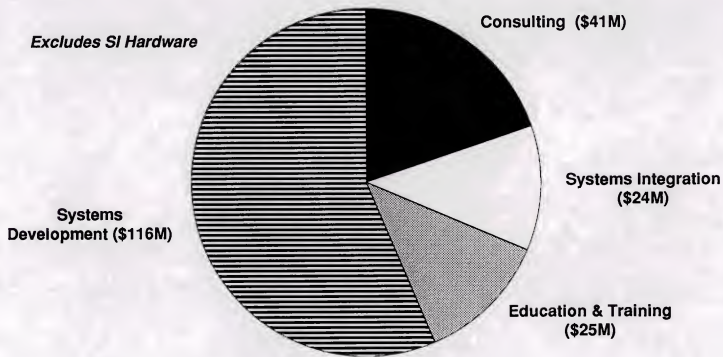


OBSERVATIONS SPECIFIC INDUSTRIES

- Dominance of state government market is clear
- Local government may present significant opportunities
- Miscellaneous Industries dominated by agriculture
- Key vertical markets (*excluding Miscellaneous Industries*) all have local growth rates above 14%
- Process manufacturing dominated by food processing
- Distribution dominated by agricultural industry
- Discrete manufacturing dominated by low MIPS intensive SIC codes and small sized firms

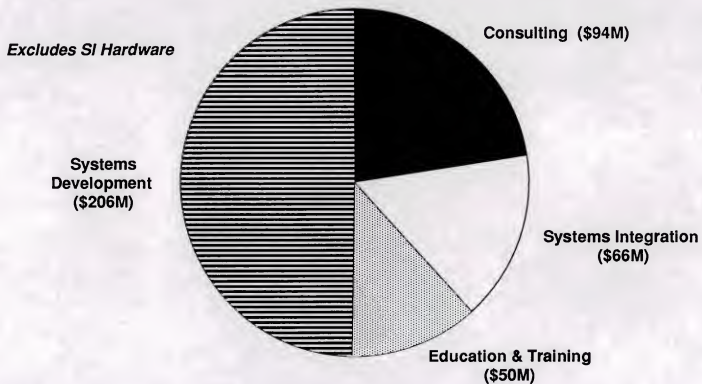


PROFESSIONAL SERVICES - CORE AREA (ADJ) - 1990 TOTAL (\$206M)





PROFESSIONAL SERVICES - CORE AREA (ADJ) - 1995 TOTAL (\$416M)



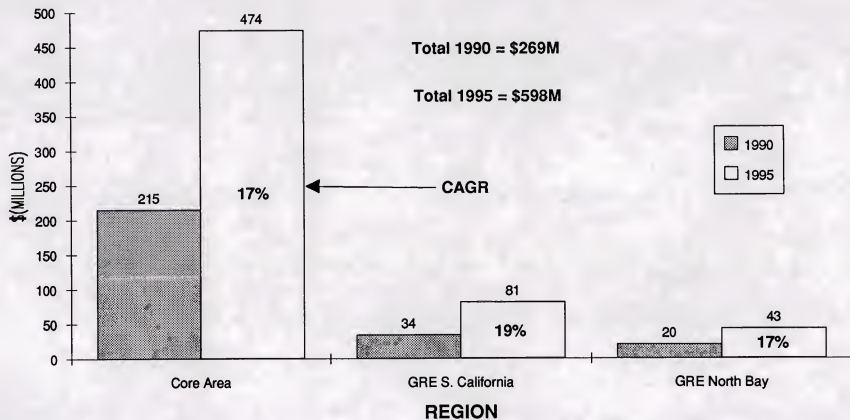


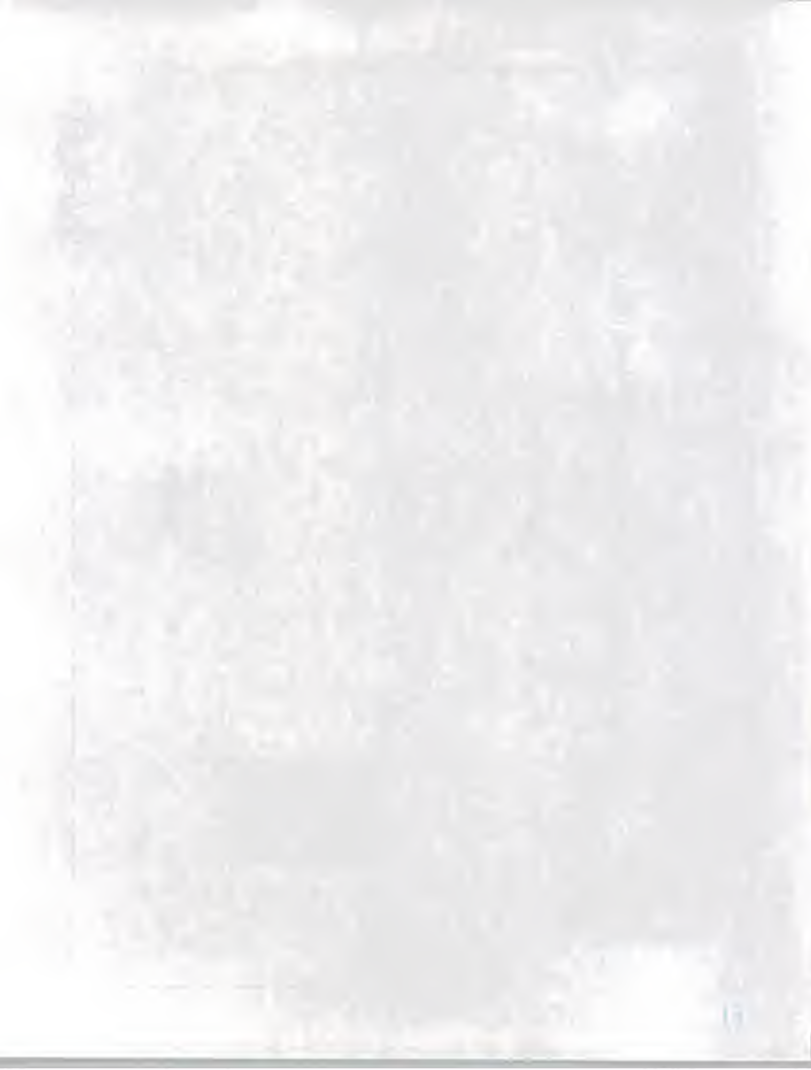
OBSERVATIONS PROFESSIONAL SERVICES

- Systems Integration is the fastest growing segment reflecting trend toward solution buying and outsourcing
- Consulting services also growing rapidly
- Systems development still growing, but probably not as attractive from a margin view-point as value added professional services offerings
- Applications Operations presents a unique professional services opportunity in the outsourcing market
- Professional services key to creation of solution based products



DISTRIBUTION OF STATE IS EXPENDITURES (ADJ)





OBSERVATIONS STATE INFORMATION SYSTEMS EXPENDITURES

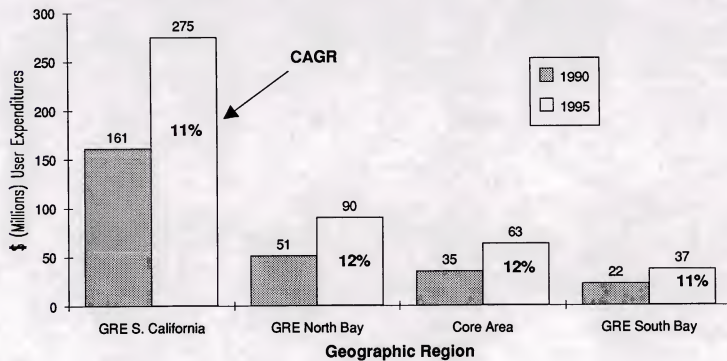
- **80%** Controlled from the Sacramento Core Area
- Growth rate consistent with national averages but requires further study

(Recessionary impacts & budget problems not accounted for in this phase of the analysis)

- Buying points for non-Core Area expenditures not clear
- Results of analysis consistent with INPUT's preliminary study of California state Information Technology expenditures



USER EXPENDITURES IN EDUCATION (ADJ)





OBSERVATIONS STATE-WIDE EDUCATION

- University of California excluded where possible
- Southern California including San Diego and Los Angeles basin dominate
- Growth rates probably optimistic due to California's peculiar funding approach and state budget problems
- Best opportunities in California State system, but would need to be tested
- Pricing a sensitive issue in all education contracts
- Good opportunity for sale of "replicable" solutions



HIGH POTENTIAL OFFERINGS INPUT's VIEW

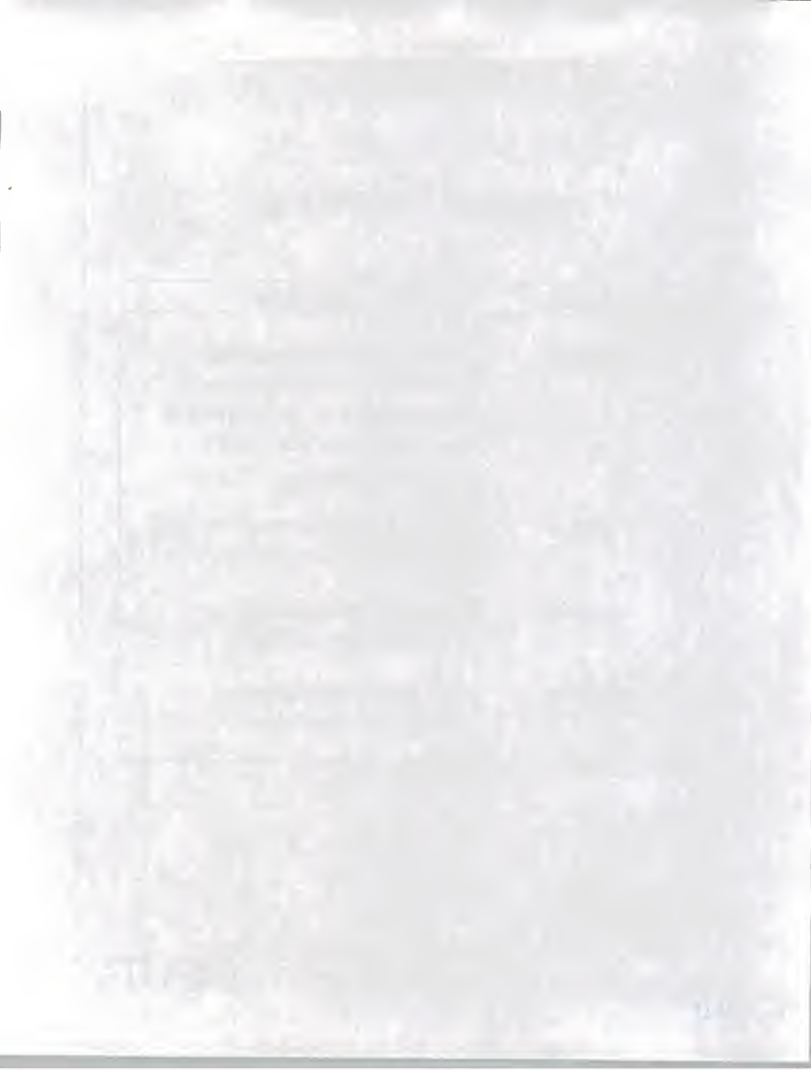
- Systems Integration
- Applications Operations
- LAN Management Services

Focused on Specific Vertical Markets



SYSTEMS INTEGRATION

Subject	Description
Offering	Assumption of full management responsibility for the design and implementation of total solutions to client applications requirements Project orientation
Platforms	AS/400, AIX, ES Environments, DEC, Relational DB, large-scale for State
Requirements	Consultive sell, vertical/process knowledge, methodology
Markets	State government, education, miscellaneous industries



APPLICATIONS OPERATIONS

Subject	Description
Offering	Long-term management of significant applications suites, including migration services to new platforms, etc.
Platforms	Primary focus on IBM platforms to leverage expertise, product drag
Requirements	Re-engineering capabilities, methodology, applications knowledge
Markets	All growing verticals; cross-industry such as accounting, office systems



LAN MANAGEMENT SERVICES

Subject	Description
Offering	Medium to long-term planning and management of user LAN-based processing facilities and/or applications systems
Platforms	Targeted for IBM shops or situations where migration to IBM solutions has potential
Requirements	Solution-packs for targeted industry of cross-industry applications; planning and migration methodology
Markets	Existing customers; industries prone to merger and downsizing, such as manufacturing, and distribution



CONCLUSIONS

- Key opportunities exist in value-added professional services: "body shop" services not tenable for IBM, except in areas where competition is light
- SI/SO offer good opportunities for IBM product drag
- Downsizing trend creates "solution sales" opportunities: AS/400 as server
- Solution packages for key verticals tailored to middle sized companies should do well - "resalable" if properly constructed
 - Agriculture and distribution
 - Local government and education



RECOMMENDATIONS

- Select key markets for field study
 - Miscellaneous Industries
 - Distribution
 - Local Government
- Sample top companies in all promising industry sectors in core trading area for:
 - Identification of product/service needs
 - Identification of key competitors
 - Validation of market sizes and growth rates
- Utilize field research to certify buying point analysis



1990 - 1995 AREA FORECASTS



INPUT MARKET SIZE FOR CORE SERVICE AREA (ADJ) -1995

	Processing Services				Proc \$	Turnkey	Applic	Systems S/W	Systems Opns	Systems Integr	Professional Services				Prof \$	Network Services			Net \$	Systems S/W	Info Svcs
	Trans	Utility	Other	Educ							Syst	Electr	Network	Total							
	Proc	Services		Consult							Trng		Devel			Info	Applic				
CATEGORY TOTALS	144	6	29	179	146	295	231	238	106	58	248	412	126	60	186	381	2068				
Discrete Manufacturing	5	0	1	6	16	22	5	10	7	4	15	26	1	0	1	20	106				
Process Manufacturing	9	1	2	12	8	16	9	3	8	4	19	31	20	3	23	22	124				
Transportation	5	0	1	6	2	4	0	1	0	0	1	1	2	0	2	3	19				
Utilities	3	0	1	4	1	4	1	6	1	1	1	3	0	0	0	4	23				
Telecommunications	18	1	4	23	9	14	1	5	5	2	12	19	5	0	5	16	92				
Retail Distribution	2	0	0	2	7	6	2	6	1	0	1	2	3	1	4	6	35				
Wholesale Distribution	5	0	1	6	7	15	2	3	1	1	3	5	2	5	7	9	54				
Banking and Finance	22	1	4	27	5	22	12	4	3	1	6	10	11	1	12	18	110				
Insurance	4	0	1	5	3	17	8	4	4	2	11	17	4	0	4	13	71				
Medical	10	1	2	13	16	40	21	5	1	1	3	5	12	6	18	24	142				
Education	4	0	1	5	5	28	2	3	0	0	1	1	7	2	9	10	63				
Business Services	6	0	1	7	5	11	0	1	0	0	1	1	11	0	11	6	42				
Consumer Services	10	1	2	13	1	3	0	1	0	0	0	0	1	0	1	4	23				
Federal Government	7	0	1	8	14	40	49	107	12	8	42	62	20	34	54	82	416				
State Government	20	1	4	25	10	18	90	59	46	22	99	167	6	5	11	94	474				
Local Government	6	0	1	7	3	6	29	19	15	7	31	53	2	2	4	30	151				
Misc. Industries	8	0	2	10	34	29	0	1	2	5	2	9	19	1	20	20	123				
LESS FEDERAL GOV.	137	6	28	171	132	255	182	131	94	50	206	350	106	26	132	299	1652				
STATE (TOTAL)	25	1	5	31	19	23	113	74	58	29	125	211	8	6	14	119	590				
GRE North Bay	2	0	0	2	1	2	8	5	4	2	9	15	1	0	1	9	43				
GRE South Bay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
GRE S. California	3	0	1	4	2	3	15	10	8	4	17	29	1	1	2	16	81				
Core Area	20	1	4	25	10	18	90	59	46	22	99	167	6	5	11	94	474				
EDUCATION (TOTAL)	29	1	5	35	37	207	17	21	9	1	10	14	51	14	65	69	465				
GRE North Bay	6	0	1	7	7	40	3	4	1	0	2	3	10	3	13	13	90				
GRE South Bay	2	0	0	2	3	17	1	2	0	0	1	1	4	1	5	6	37				
GRE S. California	17	1	3	21	22	122	11	12	2	1	6	9	30	8	38	40	275				
Core Area	4	0	1	5	5	28	2	3	0	0	1	1	7	2	9	10	63				



INPUT MARKET SIZE FOR CORE SERVICE AREA (ADJ) - 1990

	Processing Services				Proc \$ Total	Turnkey Systems	Applic S/W	Systems Opns	Systems Integr	Professional Services				Prof \$ Total	Network Services			Net \$ Total	Systems S/W	Info Svcs Total
	Trans	Utility								Educ	Syst	Electr	Network							
	Proc	Services													Other	Consult	Trng			
CATEGORY TOTALS	101	4	14		119	101	158	106	105	52	35	145	232	62	26		88	190	1099	
Discrete Manufacturing	4	0	1		5	10	12	2	3	3	2	9	14	0	0		0	9	55	
Process Manufacturing	7	0	1		8	5	8	4	1	4	2	10	16	10	1		11	11	64	
Transportation	3	0	0		3	1	2	0	1	0	0	1	1	1	0		1	2	11	
Utilities	2	0	0		2	1	2	0	3	0	0	1	1	0	0		0	2	11	
Telecommunications	9	1	1		11	5	6	1	2	2	1	6	9	1	0		1	7	42	
Retail Distribution	1	0	0		1	5	3	1	2	0	0	1	1	1	0		1	3	17	
Wholesale Distribution	4	0	1		5	5	8	1	1	1	0	2	3	1	2		3	5	31	
Banking and Finance	13	1	2		16	3	12	6	1	1	1	4	6	4	0		4	9	57	
Insurance	3	0	0		3	2	9	5	1	2	1	6	9	2	0		2	6	37	
Medical	8	0	1		9	12	19	10	3	1	0	2	3	6	2		8	12	76	
Education	3	0	0		3	4	16	1	1	0	0	1	1	3	1		4	5	35	
Business Services	6	0	1		7	3	5	0	0	0	0	1	1	5	0		5	3	24	
Consumer Services	7	0	1		8	1	2	0	0	0	0	0	0	1	0		1	2	14	
Federal Government	6	0	1		7	11	23	30	58	11	10	29	50	14	19		33	48	260	
State Government	12	1	2		15	6	9	34	21	20	11	54	85	3	1		4	41	215	
Local Government	4	0	1		5	2	3	11	7	6	4	17	27	1	0		1	13	69	
Misc. Industries	9	1	1		11	25	19	0	0	1	3	1	5	9	0		9	12	81	
LESS FEDERAL GOV.	95	4	13		112	90	135	76	47	41	25	116	182	48	7		55	142	839	
STATE	15	1	2		18	8	11	43	26	25	14	68	107	3	1		4	52	269	
GRE North Bay	1	0	0		1	1	1	3	2	2	1	5	8	0	0		0	4	20	
GRE South Bay	0	0	0		0	0	0	0	0	0	0	0	0	0	0		0	0	0	
GRE S. California	2	0	0		2	1	1	6	3	3	2	9	14	0	0		0	7	34	
Core Area	12	1	2		15	6	9	34	21	20	11	54	85	3	1		4	41	215	
EDUCATION	25	1	3		29	27	120	10	9	1	1	5	7	22	7		29	38	269	
GRE North Bay	5	0	1		6	5	23	2	2	0	0	1	1	4	1		5	7	51	
GRE South Bay	2	0	0		2	2	10	1	1	0	0	0	0	2	1		3	3	22	
GRE S. California	15	1	2		18	16	71	6	5	1	1	3	5	13	4		17	23	161	
Core Area	3	0	0		3	4	16	1	1	0	0	1	1	3	1		4	5	35	



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